

Applicant: Farley et al.

Application No.: 09/630,024

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. – 43. (Canceled)

44. (Currently Amended) A method implemented in a subscriber unit, wherein a multicast group comprises a plurality of subscriber units, the method comprising:

receiving a multicast group indication message, from a base station, via a first one of a plurality of wireless channels, the multicast group indication message identifying a connection identifier associated with a multicast message, wherein the connection identifier is associated with an indication of a second one of the plurality of wireless channels over which to receive the multicast message from the base station;

receiving the multicast message via the second one of the plurality of wireless channels;

transmitting a negative acknowledgment; and

receiving a retransmission of the multicast message in response to the transmitted negative acknowledgement.

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45. (Canceled)

46. (Previously Presented) The method of claim 44 further comprising:
receiving the multicast message concurrently with other subscriber units in
the multicast group.

47. (Previously Presented) The method of claim 44 wherein the second
one of the plurality of wireless channels is a dedicated channel.

48. (Previously Presented) The method of claim 44 wherein only a
subscriber unit associated with the multicast group decodes the multicast message
received over the second wireless channel.

49. (Currently Amended) A method of transmitting multicast
messages, wherein a multicast group comprises a plurality of subscriber units, the
method comprising:

transmitting a multicast group indication message, from a base station, via a
first one of a plurality of wireless channels, the multicast group indication message

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identifying a connection identifier associated with a multicast message, wherein the connection identifier is associated with an indication of a second one of the plurality of wireless channels over which a corresponding multicast message will be transmitted from the base station; and

transmitting the multicast message, from the base station, to the multicast group via the second one of the plurality of wireless channels;

receiving a negative acknowledgment from a subscriber unit associated with the multicast group; and

retransmitting the multicast message.

50. (Canceled)

51. (Previously Presented) The method of claim 49 further comprising:
performing a lookup in a routing table adapted to store entries associating a multicast group with the connection identifier; and

performing a lookup in a table adapted to associate the connection identifier with the at least one subscriber unit.

52. (Previously Presented) The method of claim 49 further comprising:

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receiving a join group request from a subscriber unit; and
adding an entry in the table indicative of an association between the
multicast group and the subscriber unit.

53. (Previously Presented) The method of claim 49 further comprising:
scanning the multicast message; and
parsing a group address in response to a determination that the multicast
message is directed to the multicast group.

54. (Previously Presented) The method of claim 53 wherein the group
address conforms to a protocol and the multicast message is parsed in accordance
with the protocol.

55. (Previously Presented) The method of claim 54 wherein the protocol
is the Internet Group Management Protocol (IGMP).

56. (Previously Presented) The method of claim 49 wherein the first one
of the plurality of wireless channels is a dedicated channel.

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57. (Currently Amended) The method of claim 49, wherein the further comprising:

~~receiving a negative acknowledgment from a subscriber unit associated with the multicast group; and~~

retransmitting the multicast message includes retransmitting the multicast message via a third one of the plurality of channels.

58. (Canceled)

59. (Currently Amended) A subscriber unit comprising:

a receiver configured to:

receive a multicast group indication message, from a base station, ~~message~~ via a first one of a plurality of wireless channels, the multicast group indication message identifying a connection identifier associated with a multicast message, therein the connection identifier is associated with an indication of a second one of the plurality of wireless channels over which to receive a corresponding multicast message; and

receive the multicast message, from the base station, via the second one of the plurality of wireless channels; and

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a transmitter configured to transmit a negative acknowledgement; and
wherein the receiver is further configured to receive a retransmission of the
multicast message in response to the transmitted negative acknowledgement.

60. – 61. (Canceled)

62. (Previously Presented) The subscriber unit of claim 59 wherein the second one of the plurality of wireless channels is a dedicated channel.

63. (Canceled)

64. (Currently Amended) A base station for multicasting messages, the base station comprising:

a processor configured to receive a multicast message addressed to a multicast group having two or more subscriber units;

a transmitter configured to;

transmit a multicast group indication message to a multicast group via a first one of a plurality of wireless channels, the multicast group indication message identifying a connection identifier associated with a multicast message,

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wherein the connection identifier is associated with an indication of a second one of the plurality of wireless channels over which a corresponding multicast message will be transmitted; and

transmit the multicast message, to the multicast group, via the second one of the plurality of wireless channels; and

a receiver configured to receive a negative acknowledgment from a subscriber unit associated with the multicast group;

wherein the transmitter is further configured to retransmit the multicast message in response to the negative acknowledgement.

65. (Canceled)

66. (Previously Presented) The base station of claim 64 wherein:

the processor is further configured to perform a lookup in a routing table adapted to store entries associating a multicast group with the connection identifier; and to perform a lookup in a table adapted to associate the connection identifier with the at least subscriber units.

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67. (Previously Presented) The base station of claim 66, further comprising:

a receiver configured to receive a join group request from a subscriber unit;

wherein the processor is further configured to add an entry in the table indicative of an association between the multicast group and the subscriber unit.

68. (Previously Presented) The base station of claim 64 wherein the processor is further configured to scan the multicast message; and to parse a group address in response to a determination that the multicast message is directed to the multicast group.

69. (Previously Presented) The base station of claim 68 wherein the group address conforms to a protocol and the multicast message is parsed by the processor in accordance with the protocol.

70. (Previously Presented) The base station of claim 69 wherein the protocol is the Internet Group Management Protocol (IGMP).

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71. (Previously Presented) The base station of claim 70 wherein the first one of the plurality of wireless channels is a dedicated channel.

72. (Currently Amended) The base station of claim 64, ~~further comprising:~~

~~a receiver configured to receive a negative acknowledgment from a subscriber unit associated with the multicast group;~~

wherein the transmitter is ~~further~~ configured to retransmit the multicast message via the second one of the plurality of wireless channels in response to the negative acknowledgement.

73. (Currently Amended) The method of claim 44, ~~further comprising~~

~~transmitting a negative acknowledgment; and~~

~~wherein receiving a~~ the retransmission of the multicast message is received via the second one of a plurality of wireless channels ~~in response to the transmitted negative acknowledgement.~~

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74. (Currently Amended) The subscriber unit of claim 59, ~~further comprising~~

~~a transmitter configured to transmit a negative acknowledgement; and~~
wherein the receiver is ~~further~~ configured to receive [[a]] the retransmission of the multicast message via the second one of [[a]] the plurality of wireless channels in response to the transmitted negative acknowledgement.

75. (New) The method of claim 44, wherein the retransmission of the multicast message is received via a third one of a plurality of wireless channels

76. (New) The method of claim 49, wherein the retransmitting the multicast message includes retransmitting the multicast message via the second one of the plurality of channels.

77. (New) The subscriber unit of claim 59, wherein the receiver is configured to receive the retransmission of the multicast message via a third one of the plurality of wireless channels in response to the transmitted negative acknowledgement.

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78. (New) The base station of claim 64, wherein the transmitter is configured to retransmit the multicast message via a third one of the plurality of wireless channels in response to the negative acknowledgement.